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PROFILES OF TRADE AND TECHNICAL TEACHERS--SUMMARY REPORT, 1967.

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THE POPULATION FOR THIS STUDY WAS LIMITED TO TRADE AND TECHNICAL TEACHERS IN CALIFORNIA WHO HELD FULL-TIME CREDENTIALS AND WHO WERE NOT ENGAGED PRIMARILY IN ADMINISTRATION OR SUPERVISION. TABLES, CHARTS, AND GRAPHS PRESENT INFORMATION CONCERNING THE SUBJECTS TAUGHT, AGE, SEX, MARITAL STATUS, TYPE OF SCHOOL, CREDENTIALS AND EDUCATION (BOTH CURRENT AND PLANNED), EARNINGS, STATUS, ORGANIZATIONAL AFFILIATIONS, AND DISTRIBUTION BY COUNTIES. A COMPREHENSIVE REPORT, PRESENTING DETAILS IN EACH OF THESE AREAS, IS IN PREPARATION. (HH)

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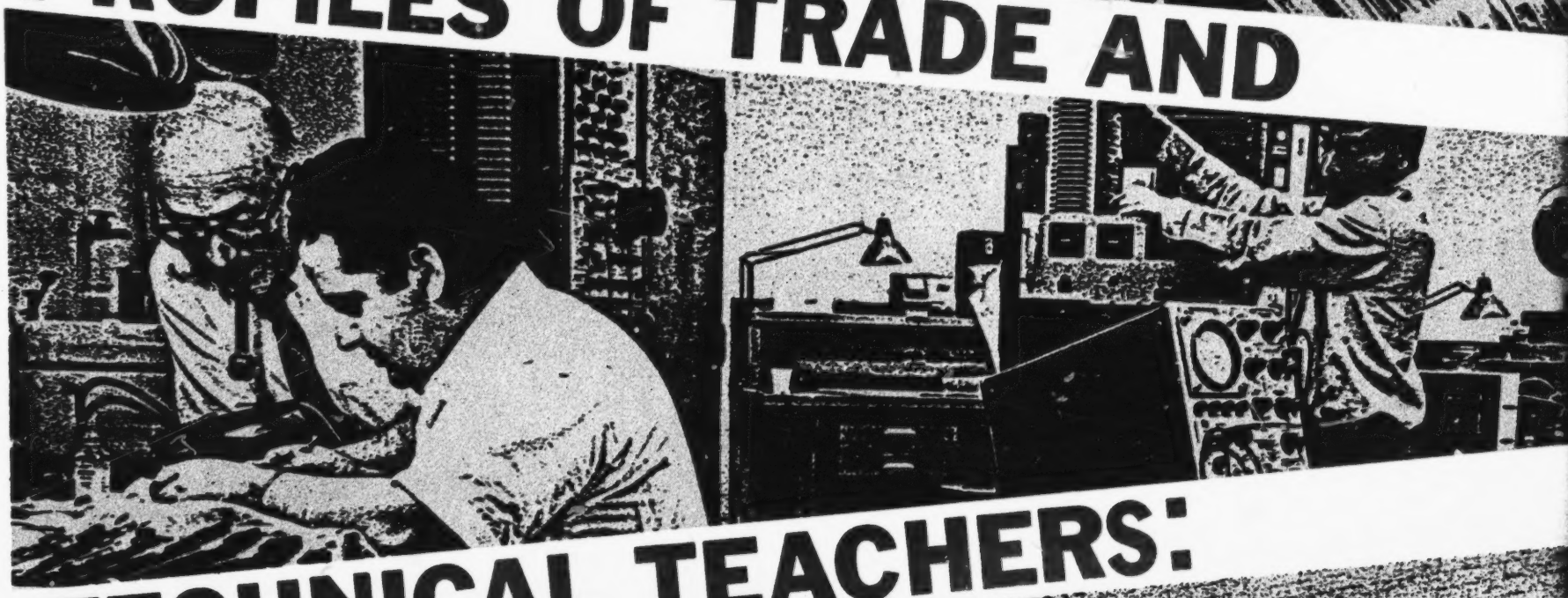
PROFILES OF TRADE AND TECHNICAL TEACHERS:



SUMMARY REPORT 1966-1967

MELVIN L. BARLOW
BRUCE REINHART

Division of Vocational Education
University of California, Los Angeles

In Cooperation With

Bureau of Industrial Education
California State Department of Education

JC 670 972

PROFILES OF TRADE AND TECHNICAL TEACHERS: SUMMARY REPORT

1967

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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UNIVERSITY OF CALIF.
LOS ANGELES

NOV 20 1967

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

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Foreword

The information assembled in this report provides a descriptive profile of the trade and technical teacher in California. It also explores many facets of his teaching and training. The perceptions and attitudes of teachers are of particular value.

This research has been needed for a long time by the Bureau of Industrial Education, teacher training institutions, county boards of education and local school districts. It is needed for policy development and decision-making. It helps us know how teachers think and feel about key issues and how we can work to enhance the status of trade and technical teachers. It provides the facts which document the advances we have made in our profession.

This data will be used wherever it is appropriate in California and throughout the nation to further the cause of trade and technical education. It helps answer many questions which are being raised today and provides directions for meeting the needs of tomorrow.

I am grateful to all of the teachers and administrators who have given their assistance to this research project.

Richard S. Nelson

Richard S. Nelson, Chief
Bureau of Industrial Education
California Department of Education

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THE PROFILES STUDY

THE PROFILES STUDY

The past few decades have seen major scientific and technological revolutions. The need for skilled technicians and craftsmen has exerted pressure upon our educational institutions to meet the demand for a trained labor force. Grant Venn states that situation in these terms.

> Technological change has, rather suddenly, thrown up a dramatic challenge to this nation's political, economic, social, and educational institutions. Though the full scope of this challenge may not be comprehended for years to come, its dimensions are now clear enough to call for a massive response on the part of American Education. All levels of education, and particularly post-secondary education, must quickly move to assume greater responsibilities for preparing men and women for entry into the changed and changing world of technological work. Unless far more and far better education on the semiprofessional, technical, and skilled levels is soon made available to greater numbers of citizens, the national economy and social structure will suffer irreparable damage.[1]

Vocational teachers are the major factor in the acquisition of "far more and far better education on the semiprofessional, technical, and skilled levels." They are the key to any adequate program for the future. But even though we have amassed enough sophisticated knowledge to carry us through space and conquer the heavens we still do not have the elemantary information about the trade and technical teachers who play a vital role in the development of trained manpower.

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[1]Grant Venn, Man, Education and Work (Washington, D. C.: American Council on Education, 1964), p. 1.

The descriptive information summarized in this greatly abbreviated report is only a small part of a much more comprehensive report currently being prepared. But even the comprehensive report fills only a small part of the vacuum of needed information about these important teachers. We are hopeful that others will be inspired to go beyong the limitations of current research and focus on the numerous remaining needs and problems of this unique group of teachers.

Previous Studies

During the past two decades three studies which have made spot inventories of the status of trade and technical teachers and one dissertation has studied the career patterns of trade and technical teachers in California. Two of the status studies, jointly conducted by Melvin L. Barlow and Gail E. Moore, covered the period 1945-1950.[2] A third study, by David Allen, covered the period 1955-1962.[3] In 1961 William J. Schill completed a doctoral dissertation[4] which surveyed the career patterns of 1,154 craftsmen who became trade and technical teachers in California.

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[2]Melvin L. Barlow and Gail E. Moore, A Study of Teachers Entering Trade and Industrial Education (Los Angeles: Division of Vocational Education, University of California, 1953).

Melvin L. Barlow and Gail E. Moore, A Survey of Trade and Industrial Teachers (Los Angeles: Division of Vocational Education, University of California, 1955).

[3]David Allen, A Study of Trade and Technical Teachers Who Received First Credentials July 1955-June 1962 (Los Angeles: Division of Vocational Education, University of California, 1963).

[4]William John Schill, "Career Patterns of Trade and Technical Educators" (Unpublished Ed.D. dissertation, Department of Education, University of California at Los Angeles, 1961).

Research Methods

The Profiles Study is more comprehensive than any other study of the subject known to the authors. The following is a description of the study.

Identification of the population. Approximately 4,000 names were considered for inclusion in the population, but many did not meet the criteria for inclusion in the study. A search for trade and technical teachers took the researchers to the files of the teachers training offices of the University of California, to the regional offices of the State Department of Education, to selected county offices and to approximately fifty schools and school districts. Junior college catalogues and the California School Directory were also searched for the names of trade and technical teachers.

The population of the study was limited to trade and technical teachers with full-time credentials who were not engaged primarily in supervision or administration. The full-time credentials which met the criteria of the study were (1) the Standard Designated Subjects, Full-time, (2) the Special Secondary Vocational - Class A and (3) the Special Secondary Vocational - Class B. Full-time teachers with additional responsibilities in supervision, administration or other school employment were considered within the parameters of the population. Teachers who held a full-time credential but worked only part-time also were included in the population.

Basic Description Questionnaire. The Basic Description Questionnaire (BDQ) was sent to approximately 2,500 teachers. When the processing

of the questionnaires began, 1,893 returns had been received. Three hundred and six of these returns failed to meet the parameters of the study and were excluded from the survey population. The data reported from the BDQ is based on 1,587 returns. We estimate that these data represent at least 75 percent of the teachers known to be within the population when the questionnaire was administered. (The current updated data bank contains information on 2,214 teachers who meet the parameters of the Profiles Study.)

The purpose of the BDQ is to collect descriptive information about the characteristics of trade and technical teachers. These data were utilized to describe the teacher population, to make comparisons with previous studies and to explore the relationships of numerous variables.

Group interviews. Fourteen group interviews were conducted in eleven counties geographically distributed throughout the state. Three hundred and ten teachers from these counties were selected randomly to attend the interviews. One hundred and eighty-five teachers attended these sessions. The interviews attempted to identify teacher perceptions and suggestions related to the following four areas:

1. The changing environment of trade and technical education
2. The relationships of trade and technical teachers with their colleagues (academic and vocational
3. The pre-service training of teachers
4. The in-service training of teachers

Data from the group interviews became the basis of the Prescription-Description Questionnaire described below.

Self-Perception Questionnaire. The Self-Perception Questionnaire (SPQ) was administered to the "captive" participants in the group interviews described above. The purpose of the SPQ was to obtain responses from teachers on a comprehensive range of teaching activities.

Prescription-Description Questionnaire. The Prescription-Description Questionnaire (PDQ) was designed to follow up the series of group interviews by mail. The items incorporated in this questionnaire were selected from typescripts and other notes made from the interviews.

Two forms (Form A and Form B) of the PDQ were utilized so that prescriptive and descriptive data could be collected from the first two sections of the instrument. The prescriptive Form A asked how frequently the suggested items should be practiced. The descriptive Form B asked how frequently the suggested items are practiced. In the third and fourth sections (pre-service and in-service) only the prescriptive data were required.

A random sample of 510 teachers was drawn from the 1,587 respondents to the BDQ. The sample also was representative of the types of institutions (high school, junior college and correctional). Half of the teachers (225) received Form A and half received Form B.

The data reported below are based on an 80 percent return (408 responses). The samples were kept representative by type of institutions.

Research Schedule

The original proposal provided for individual interviews

following the group interviews, but this plan was abandoned and a questionnaire was substituted for the individual interview. The size of the total study population originally was estimated at about 1,000 teachers. Because the population proved to be considerably larger, the required clerical work and data processing time were grossly underestimated. The original schedule was adjusted for this reason. The revised schedule follows:

July 1 -- September 30, 1966

1. Prepare list of trade and technical teachers.
2. Prepare Basic Description Questionnaire.
3. Schedule group interviews and select participants.
4. Prepare Self-Perception Questionnaire.

October 1, 1966 -- January 30, 1967

1. Conduct group interviews.
2. Administer Self-Perception Questionnaire.
3. Process data from Basic Description Questionnaire and Self-Perception Questionnaire.
4. Develop Prescription-Description Questionnaire and conduct random sampling.

February 1 -- April 15, 1967

1. Continue data analysis of all three questionnaires.
2. Present available data to Advisory Committee.

April 16 -- June 30, 1967

1. Complete data analysis.
2. Develop descriptions and interpretations.
3. Prepare report for publication.

Description of Comprehensive Report

The content of the comprehensive report of the Profiles Study

is divided into seven chapters. Three major types of institutional employment are reported in Chapter I and related to many other factors. The type of institutional employment is one of the most discriminating factors in the study. Chapter II describes the characteristics of the trade and technical teacher's career in education and the perceptions of the teachers about them. It also includes data on teachers prior to teaching. Chapter III provides an educational profile of the current population of teachers, compares the educational factor with other factors and reports a striking rise in the educational level. Analysis of memberships reported reveals that trade and technical teachers have a median of 5.6 organizational affiliations per teacher. Chapter IV describes the patterns of affiliation and the factors associated with memberships. The relationship of the teachers to their several environments is described in Chapter V. Teacher perceptions about what is most helpful in both pre-service and in-service training are reported in Chapter VI. A major finding of the study has been the respondent's desire for in-service training. A summary of the study, in Chapter VII, with interpretations and an appraisal of future developments, concludes the report.

Advisory Committee

This research is indebted to its advisory committee. The interpretation, evaluation and use of the information gathered in the course of the research have been enhanced by their guidance and cooperation.

The following persons served on this committee:

Dr. David Allen
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Trade and Technical Teacher Training
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Garfield High School
Los Angeles

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Instructor of Electronic Math
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Fullerton

Dr. John W. Dunn
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Oakland

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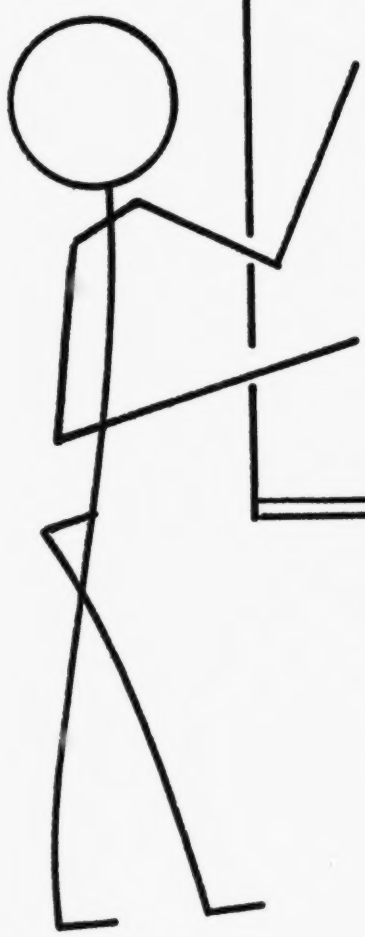
Bureau of Industrial Education
California State Department of Education
Sacramento

SUMMARY DATA

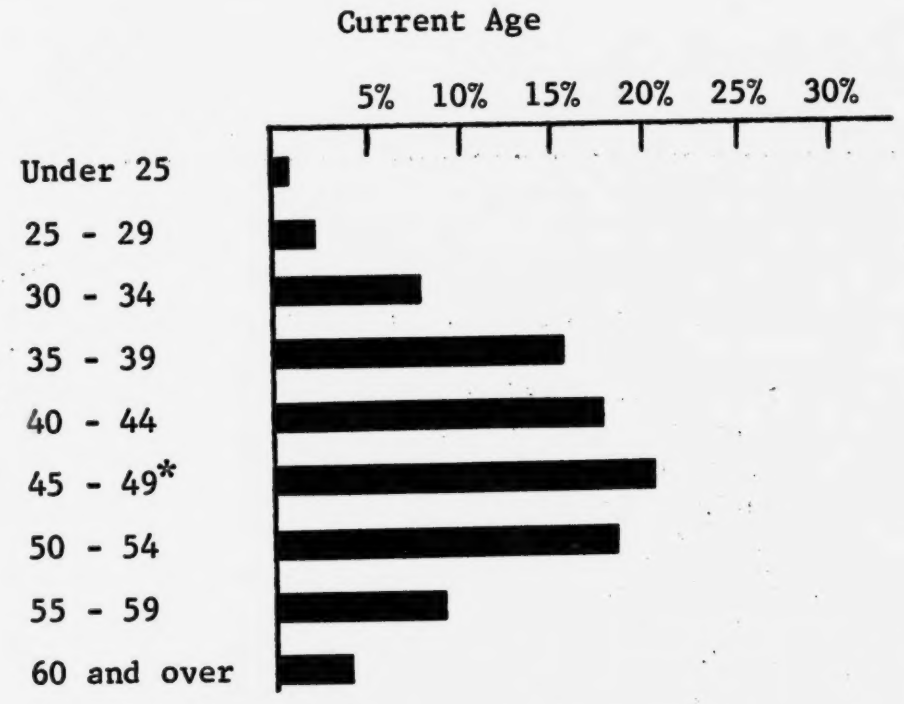
WHAT DO TEACHERS TEACH?



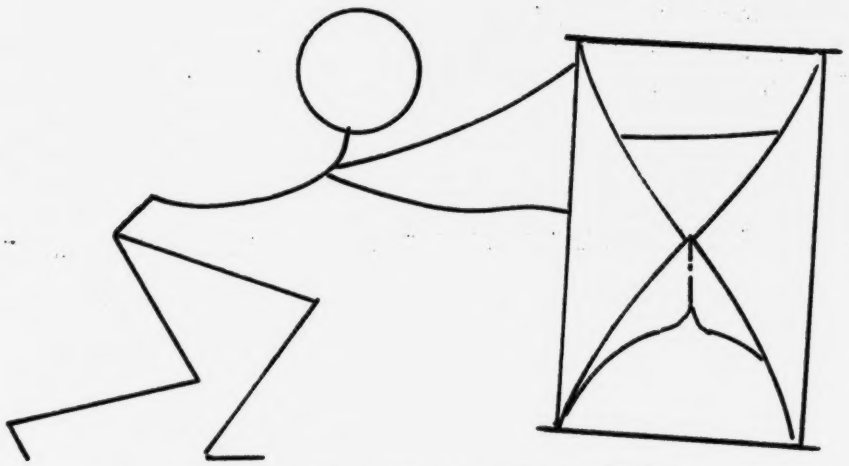
Major Subject Area Categories	Per Cent of Overall Population[5]
Practical nursing	14.0
Electric-electronic	10.5
Automotive	9.5
Machine shop	5.8
Drafting	5.0
Cosmetology	5.0
Carpentry	3.7
Peace officer	3.5
Dental	3.2
Welding	2.1
Medical	1.3
Radio-television	1.3
Photography	1.2
Sheet metal	1.0

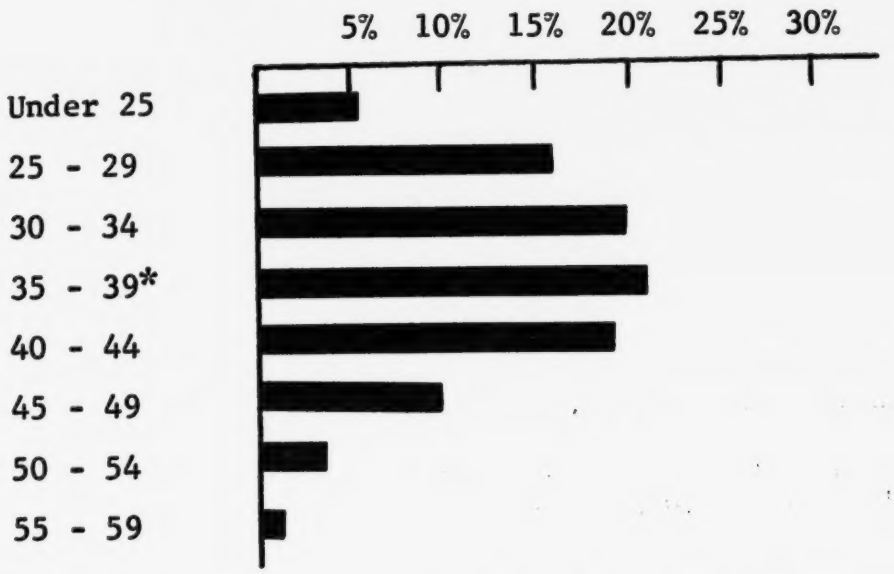
[5]All per cents in succeeding tables are assumed to be per cents of overall population unless otherwise stated.

HOW OLD ARE TRADE AND TECHNICAL TEACHERS?



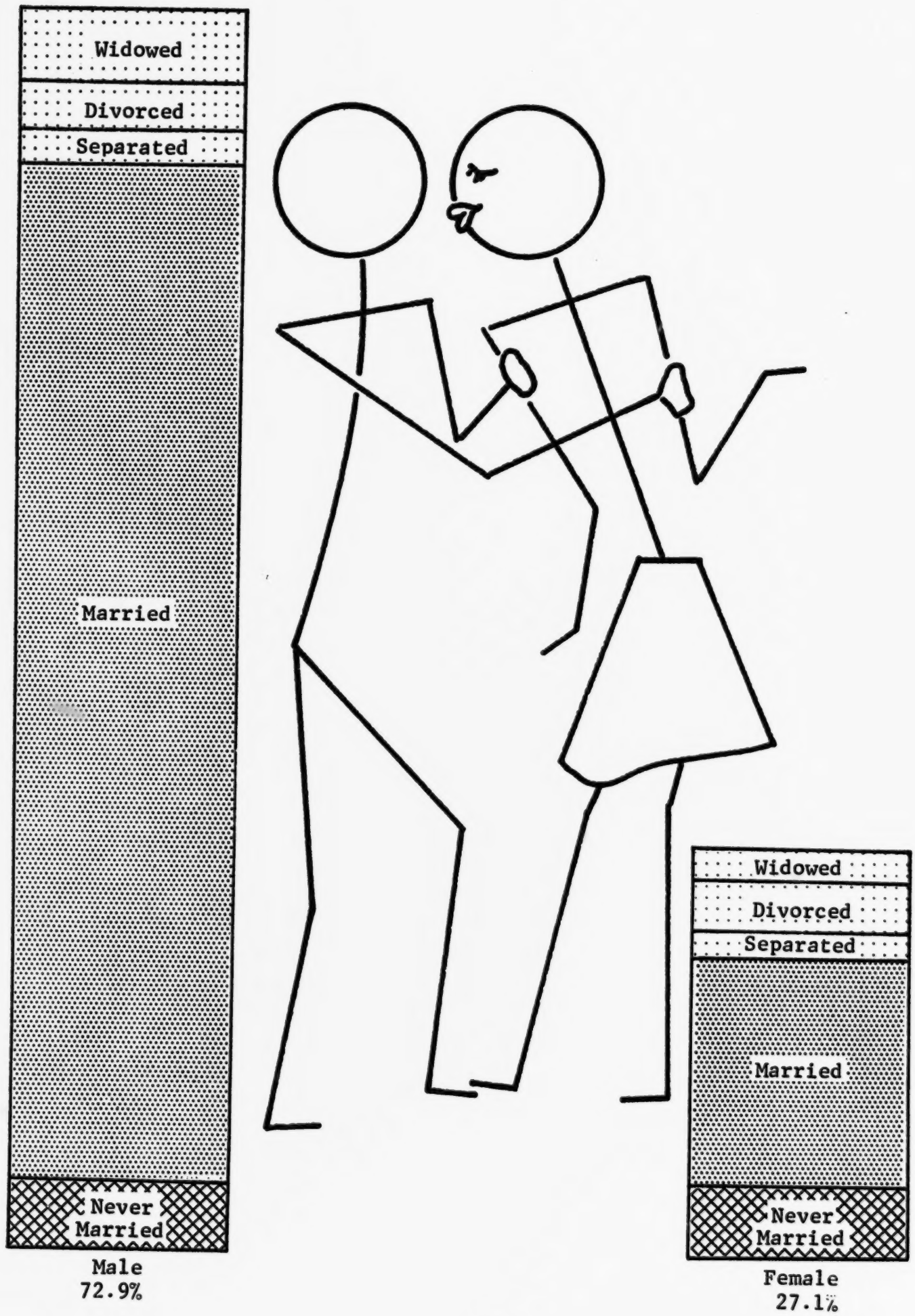
* The median age is 45.9 years.



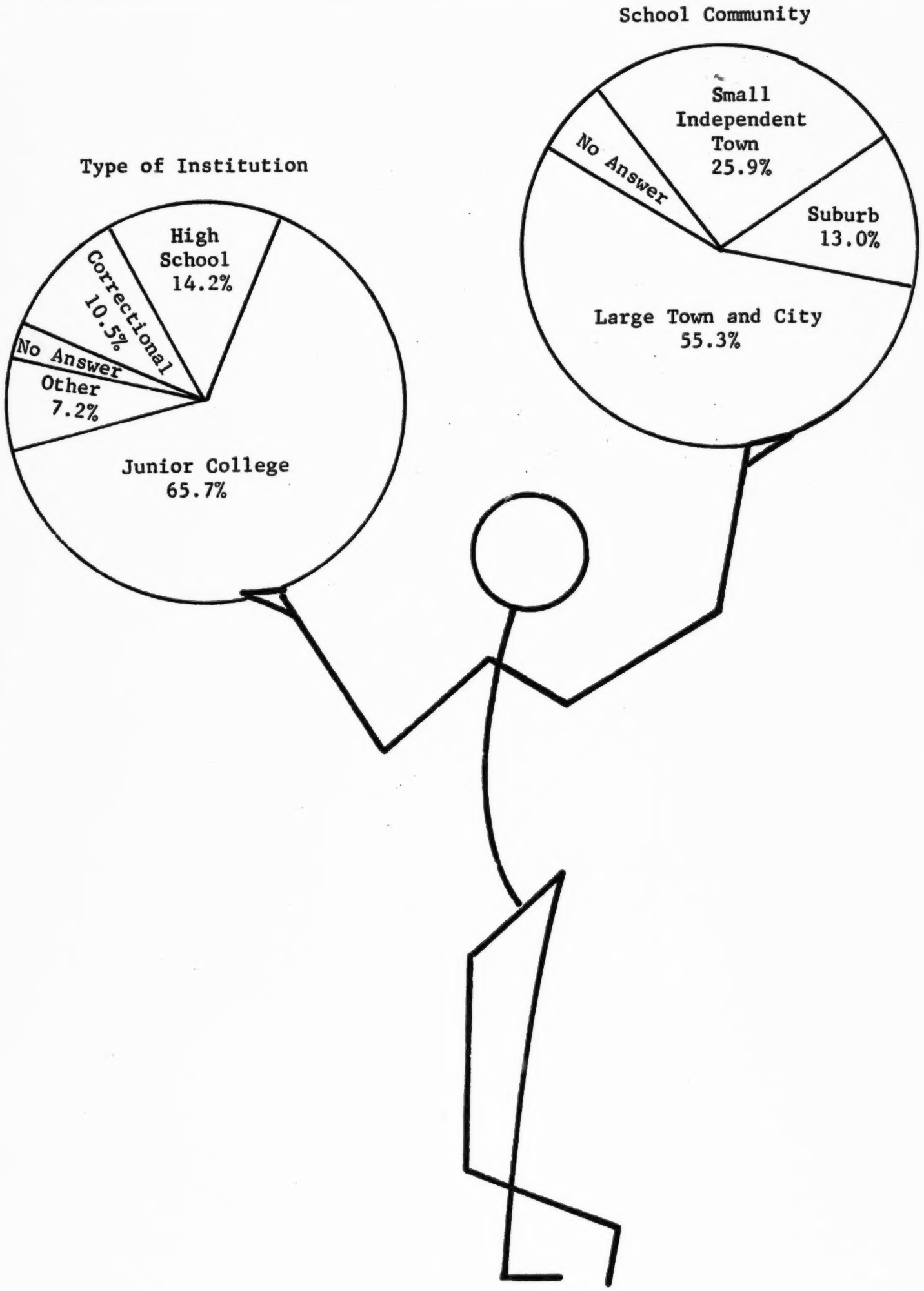


* The median age is 36.8 years.

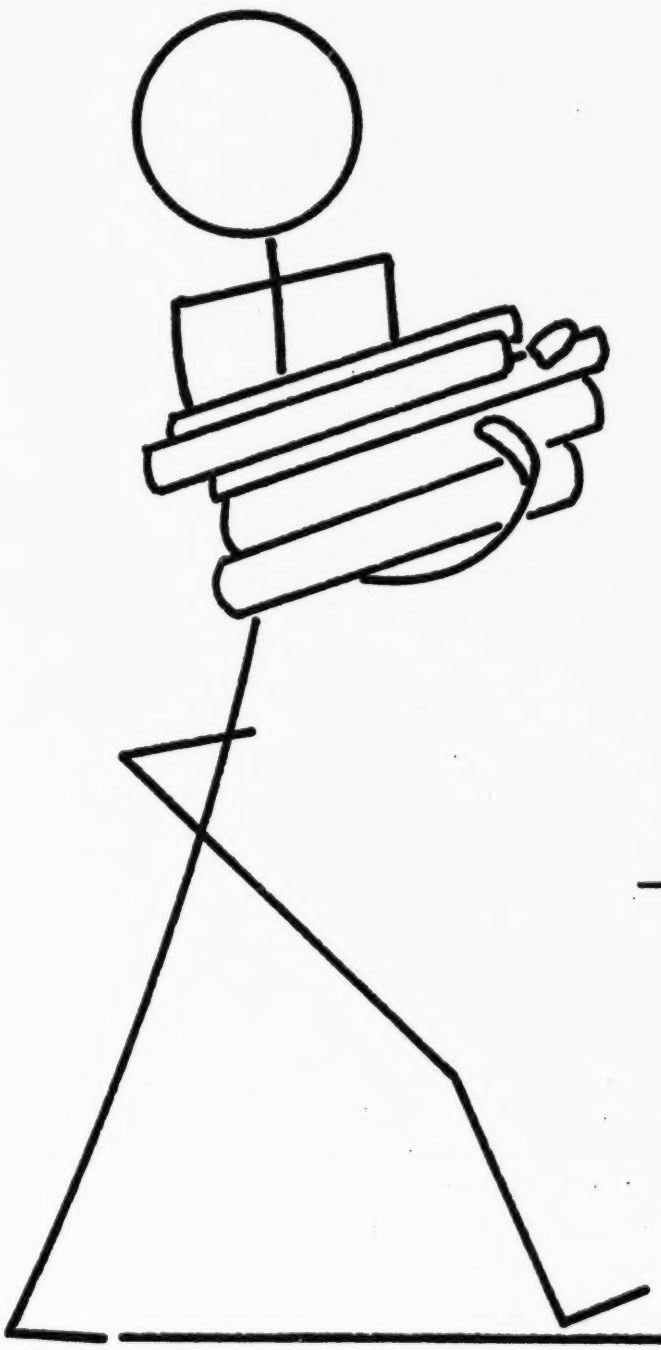
WHAT IS THE SEX AND MARITAL STATUS OF TEACHERS?

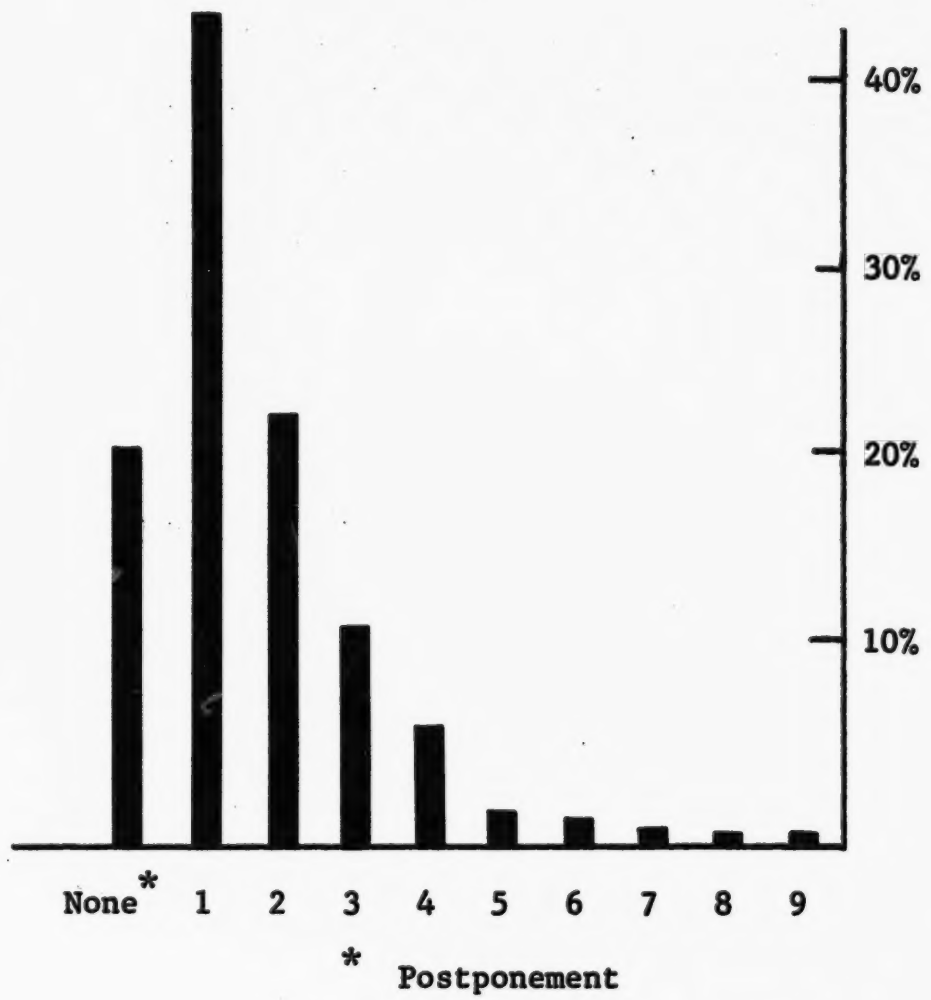


WHERE DO THE TEACHERS TEACH?



HOW MANY CREDENTIALS DO TEACHERS HOLD CLEAR?

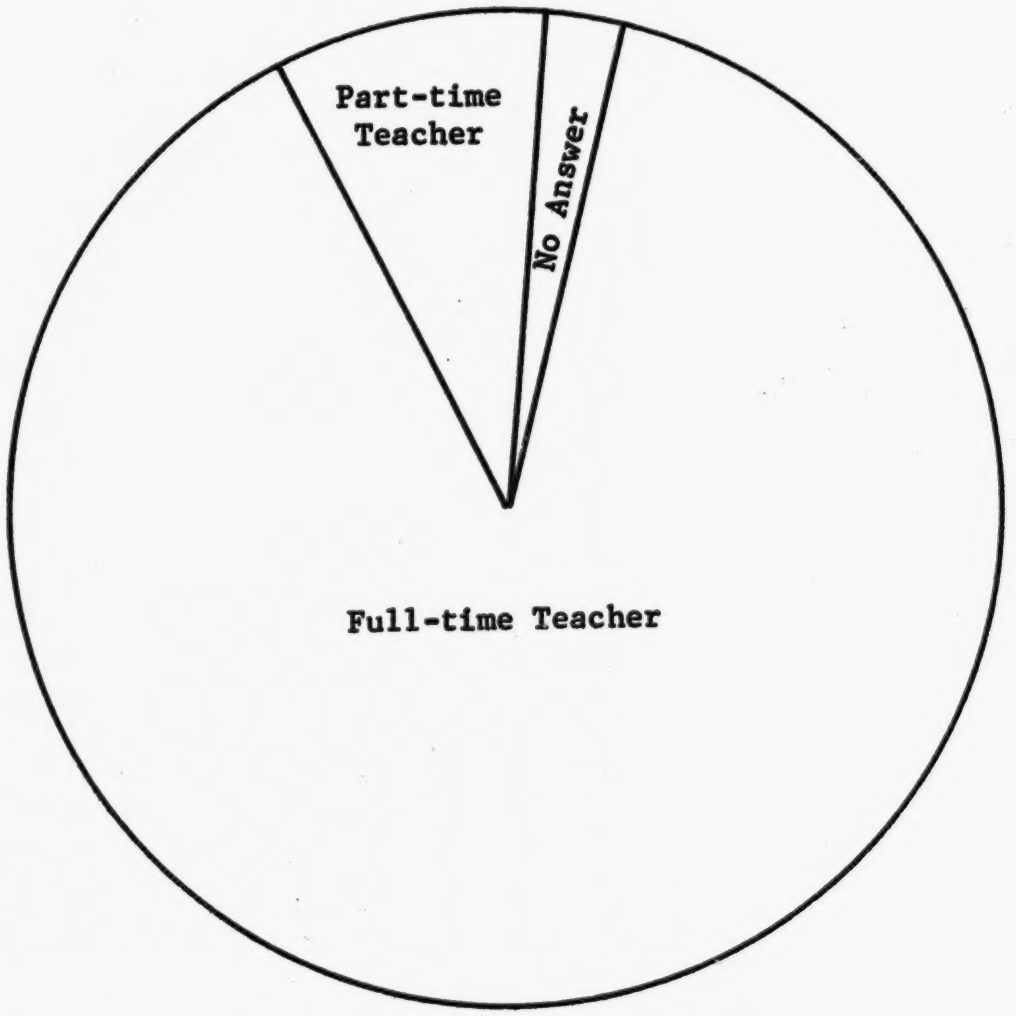




WHAT DO TEACHERS WITH FULL-TIME CREDENTIALS DO?

Part-time teacher with:

(a) no other employment	2.0%
(b) supervision and/or administration responsibilities	2.2%
(c) other school employment	1.1%
(d) other non-school employment	2.8%
	8.1%

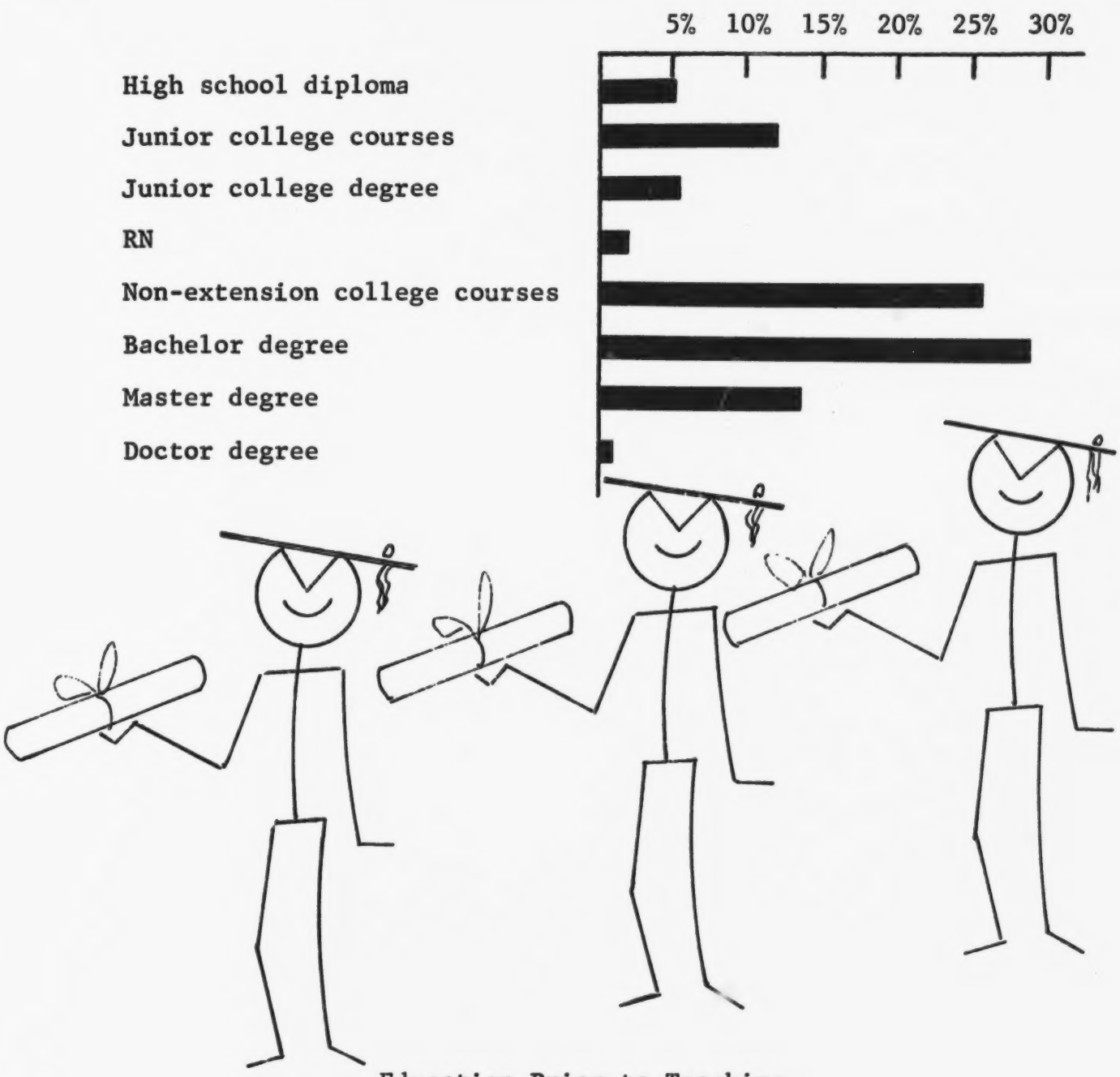


Full-time teacher with:

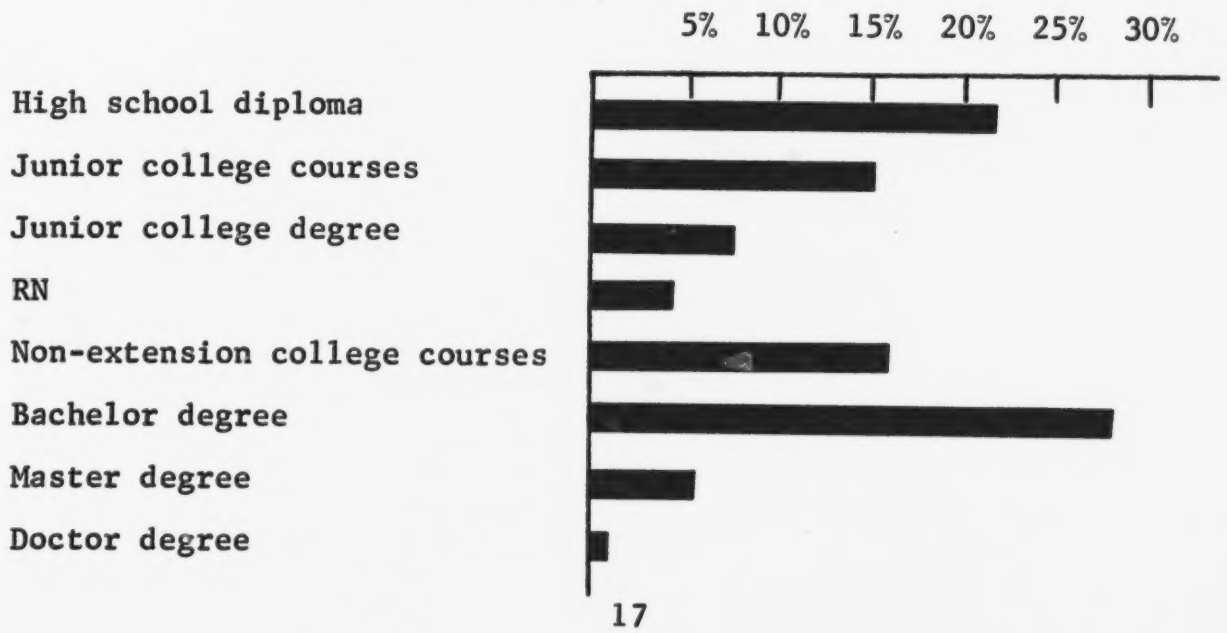
(a) no other employment	50.5%
(b) additional supervision and/or administration responsibilities	15.1%
(c) other school employment	13.0%
(d) other non-school employment	10.8%
	89.4%

HOW MUCH FORMAL EDUCATION DO TEACHERS HAVE?

Current Education



Education Prior to Teaching



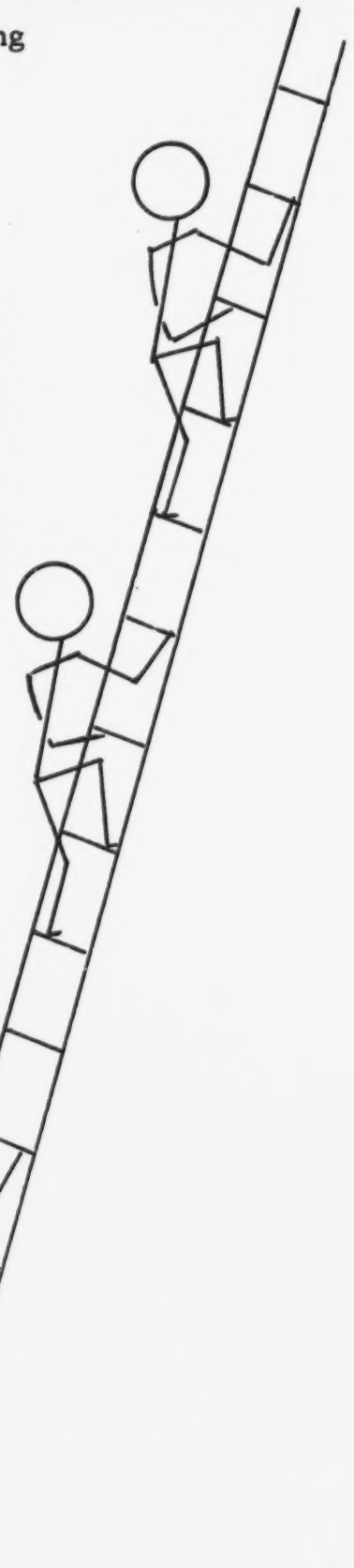
DO NEW TEACHERS HAVE MORE EDUCATION?

Studies of "Recent Entrants" at the Start of Teaching

	1967[6]
High school diploma	15.9%
Junior college courses	18.8%
Junior college degree	9.4%
RN	6.4%
Non-extension college courses	14.2%
Bachelor degree	29.3%
Master degree	4.9%
Doctor degree	1.2%

	1962[7]
High school diploma	38.7%
Junior college courses	6.4%
Junior college degree	7.5%
RN	5.7%
Non-extension college courses	9.0%
Bachelor degree	24.2%
Master degree	8.1%
Doctor degree	.4%

	1953[8]
High school diploma	59.9%
Non-extension college courses	19.9%
Bachelor degree	16.1%
Master degree	4.8%
Doctor degree	.2%

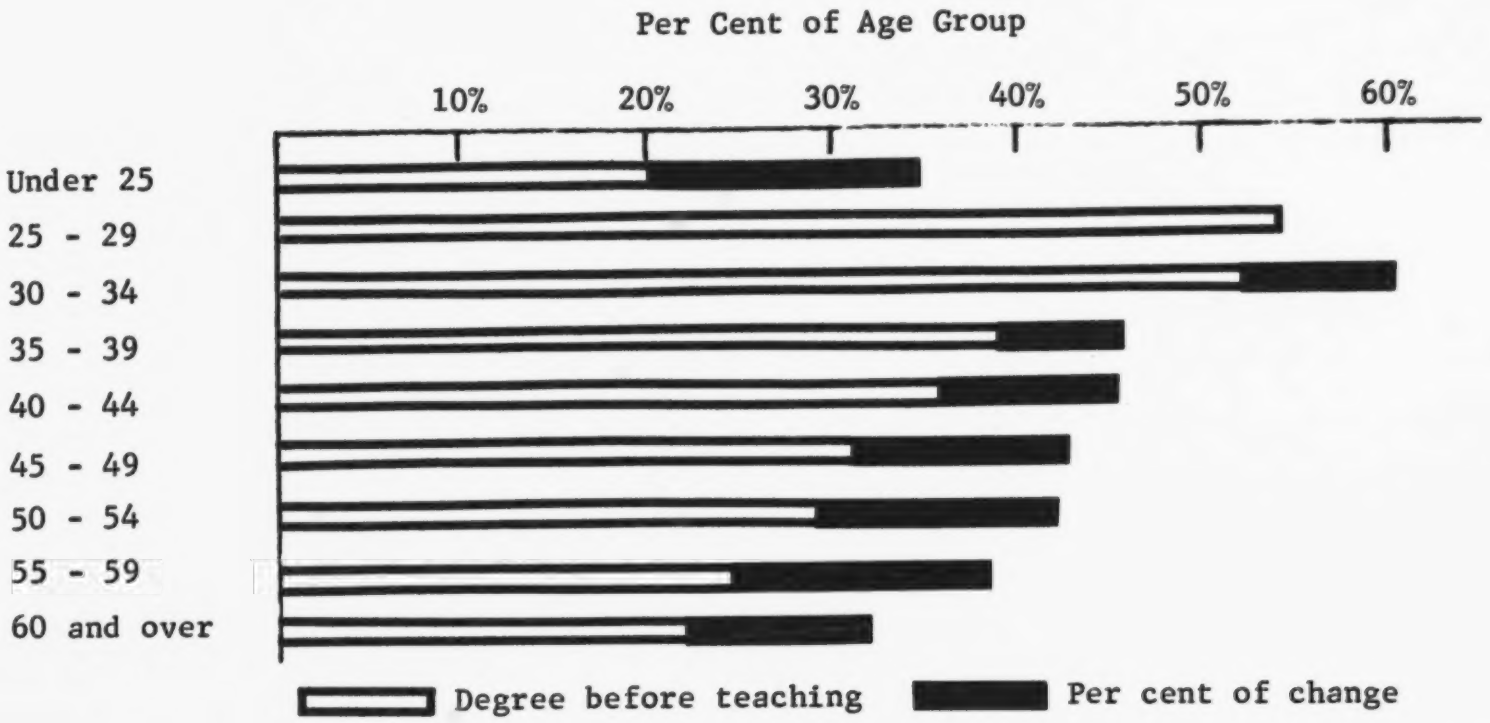


[6]The number of recent entrants from the 1967 survey is only a sample of the total population of new teachers since 1962.

[7]David Allen, A Study of Trade and Technical Teachers Who Received First Credentials July 1955-June 1962 (Los Angeles: Division of Vocational Education, University of California, 1963).

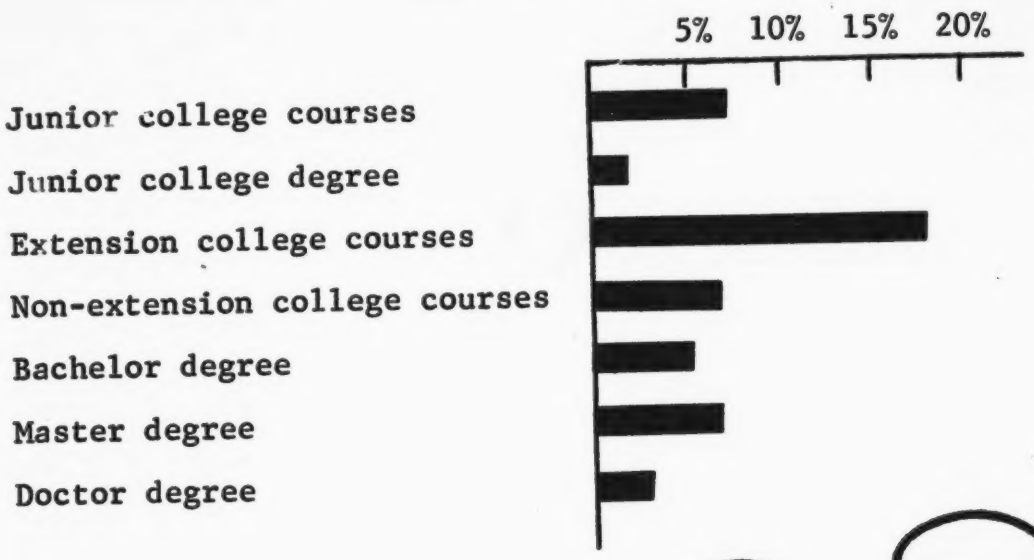
[8]Melvin L. Barlow and Gail E. Moore, A Study of Teachers Entering Trade and Industrial Education (Los Angeles: Division of Vocational Education, University of California, 1953).

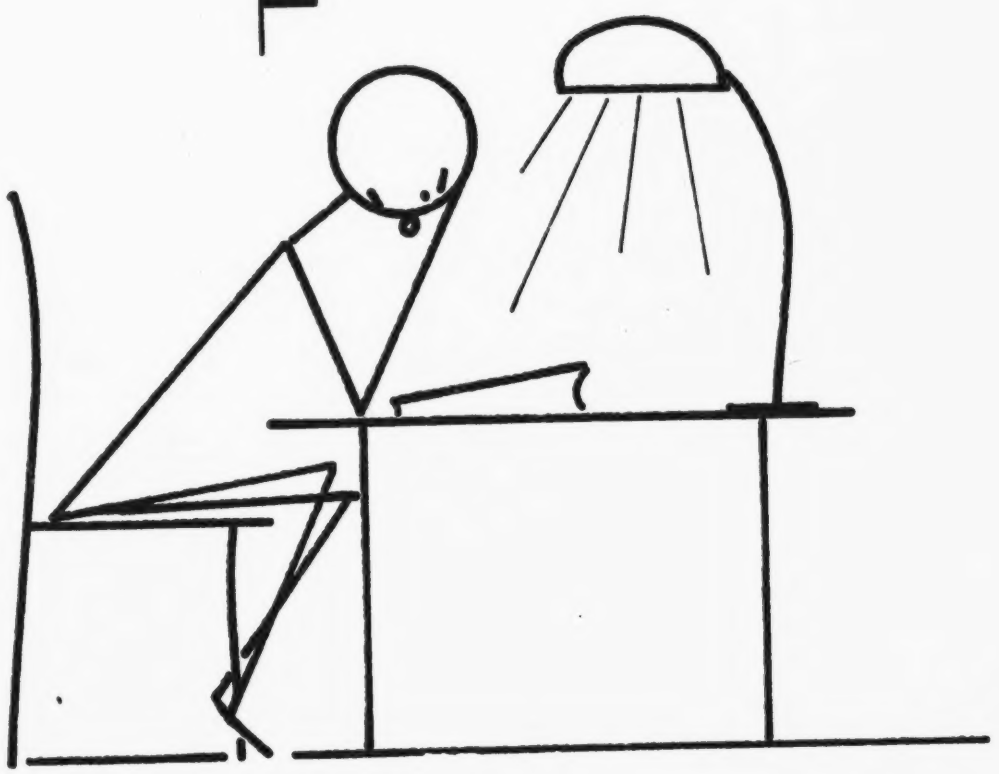
DO TEACHERS WORK FOR DEGREES WHILE TEACHING?



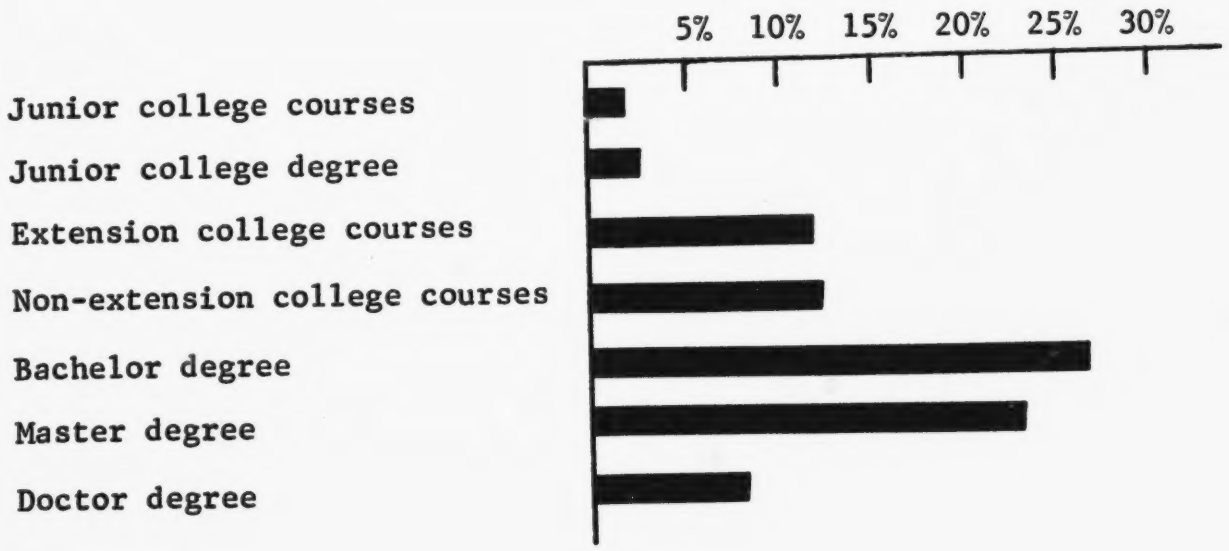
DO TEACHERS PLAN MORE EDUCATION?

Current Enrollment:



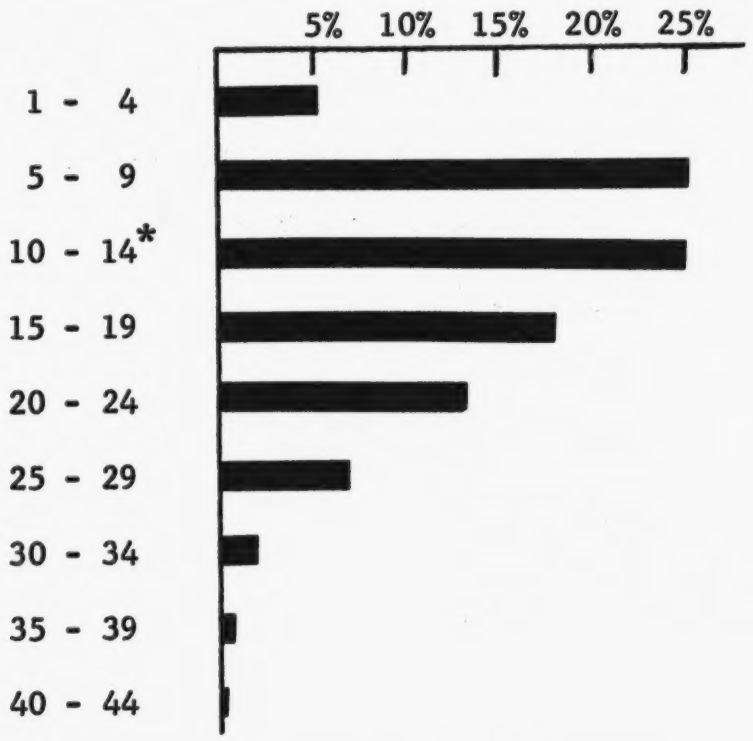


Anticipated Enrollment

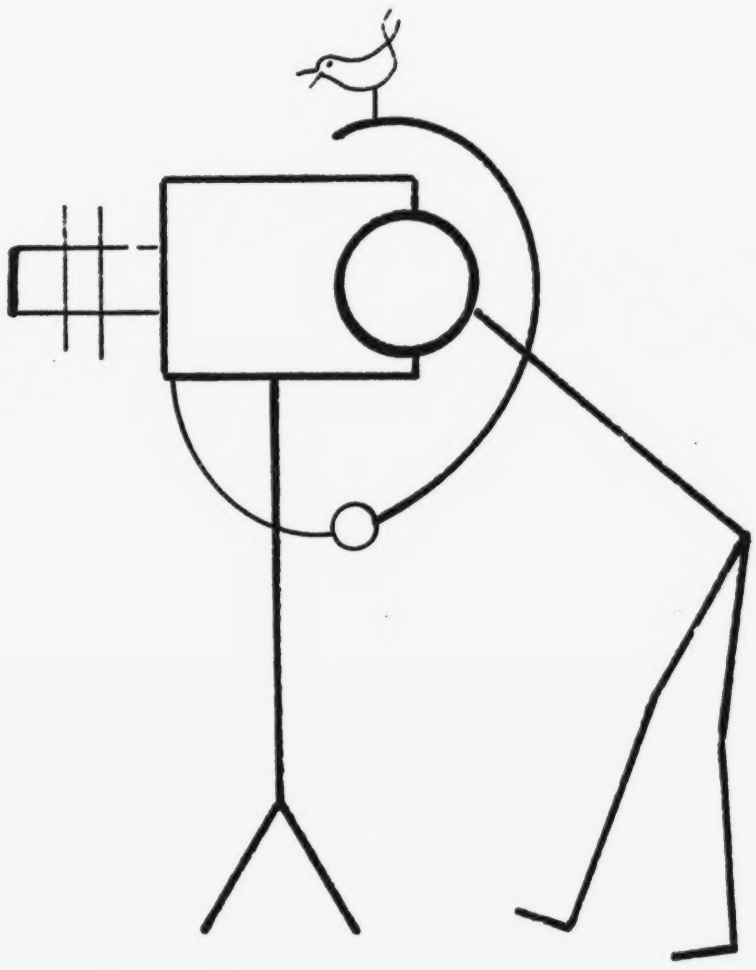


HOW MUCH WORK EXPERIENCE DO TEACHERS HAVE?

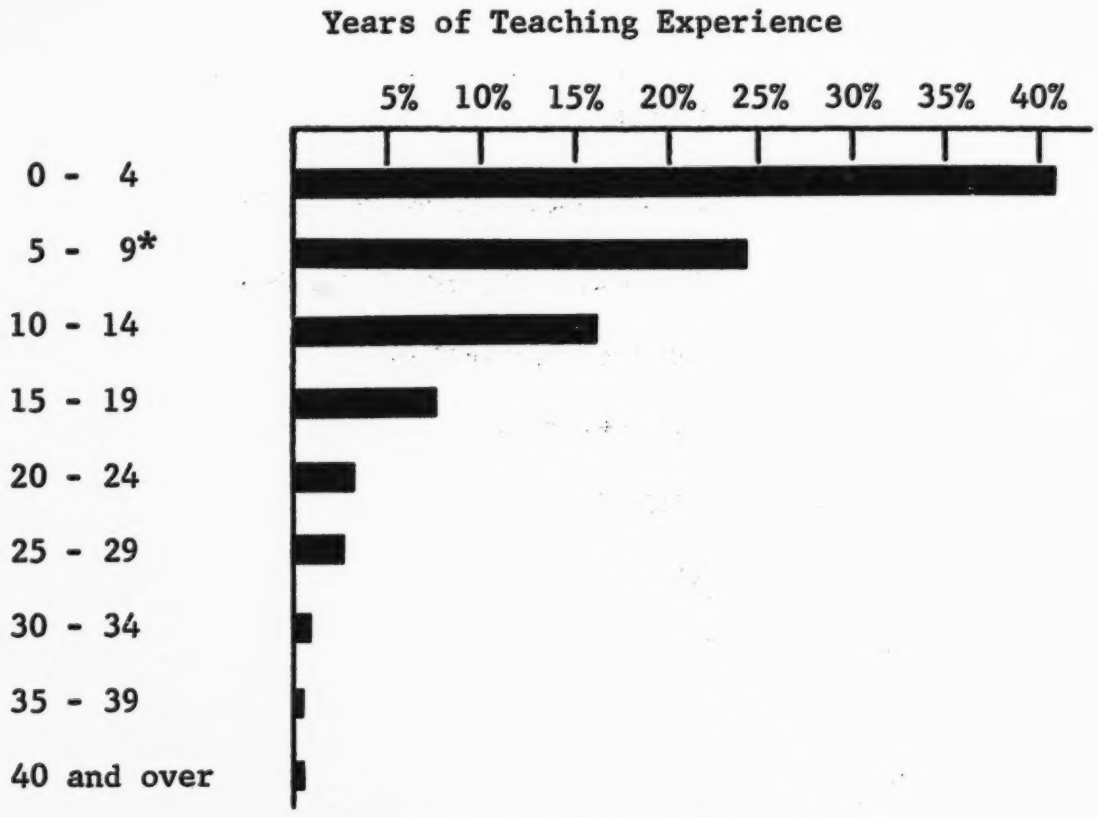
Years of Work Experience Prior to Teaching



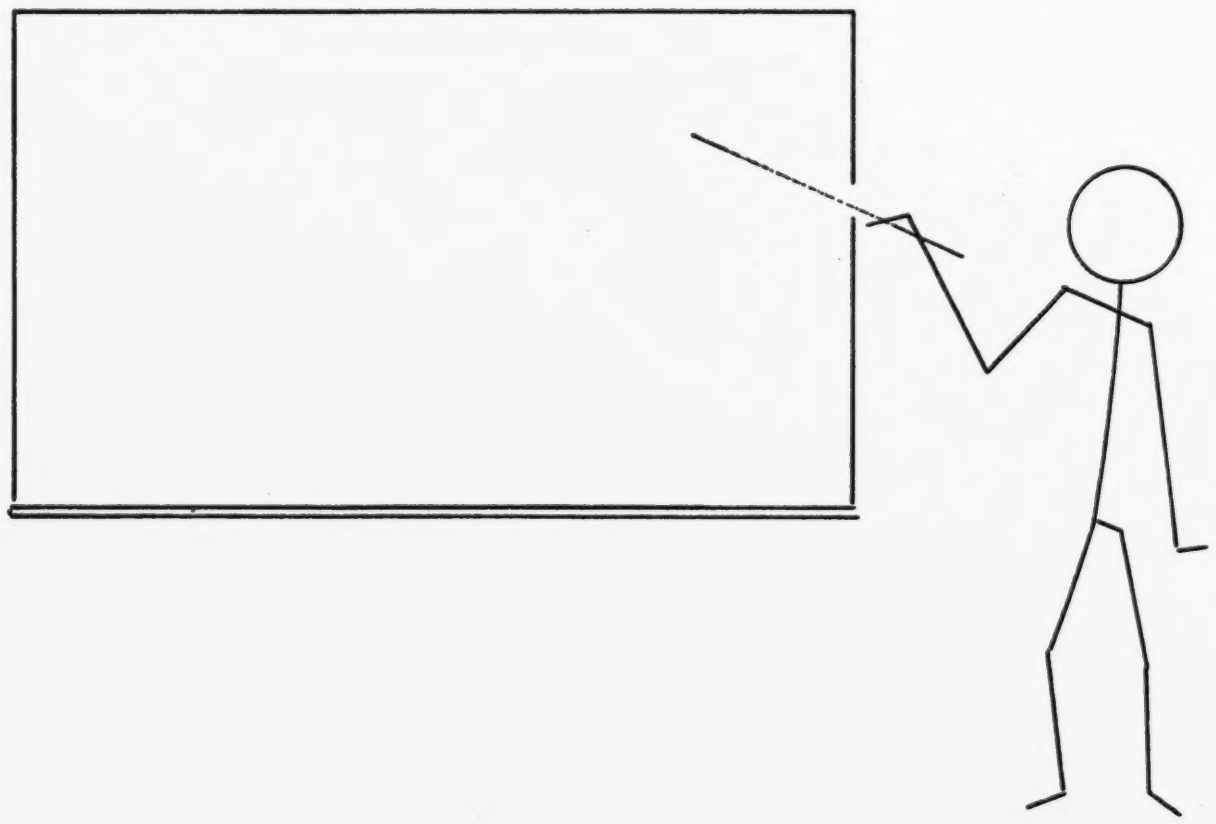
* The overall median is 13.9 years.



HOW MUCH TEACHING EXPERIENCE DO TEACHERS HAVE?



* The overall median is 6.7 years.



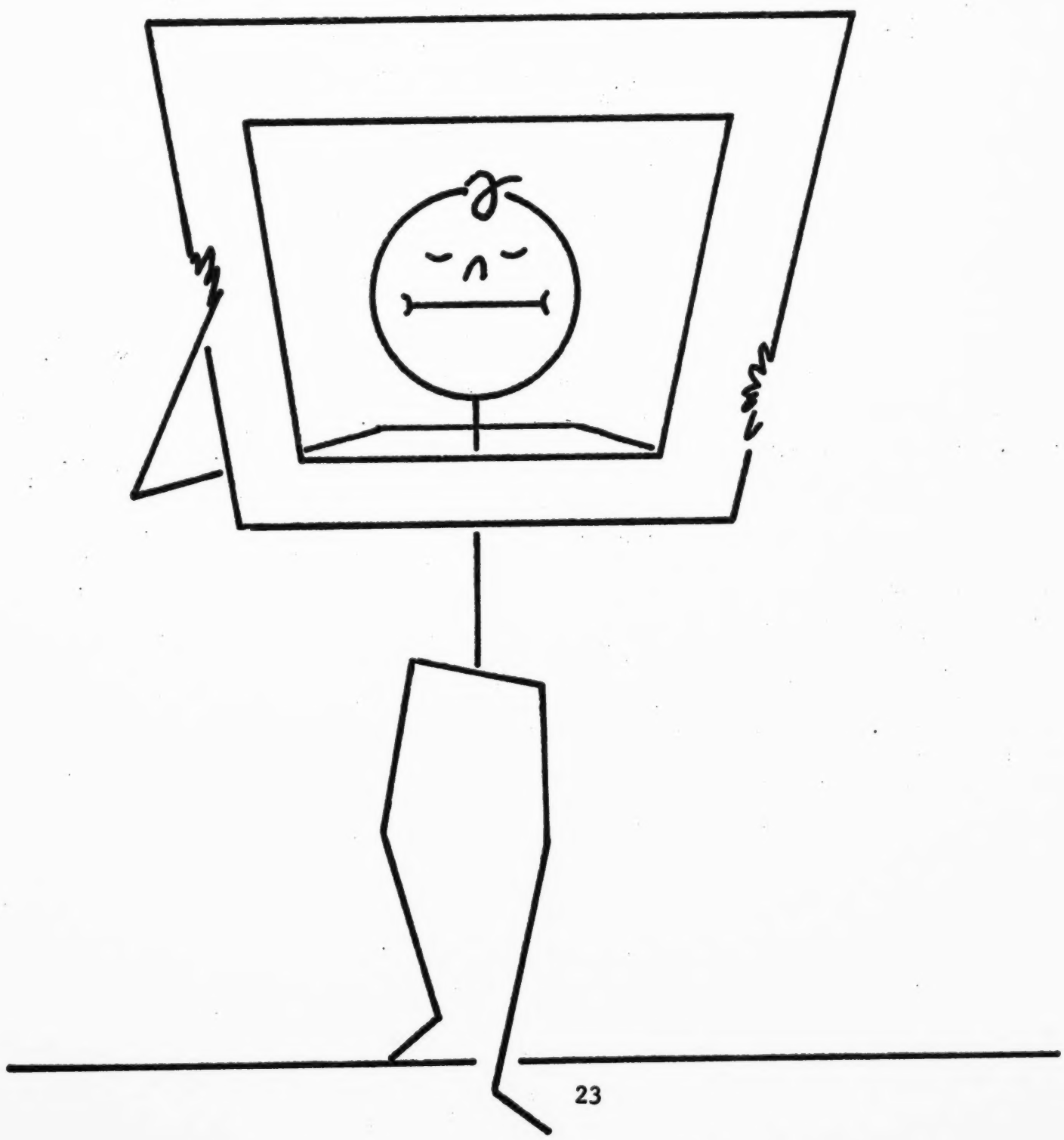
WHAT IS UNIQUE ABOUT TRADE AND TECHNICAL TEACHER CAREERS?

They are older than most other groups of teachers (median of 45.9 years) and they are older when they begin to teach (median of 36.8 years).

They have a median of 13.9 years of work experience prior to teaching.

Two-thirds teach in fourteen vocational subject areas and ninety per cent are teaching full-time.

Large numbers of recent entrants contribute to the smallness of the median (6.7 years) of teaching experience for the group. Forty per cent have taught less than five years and two-thirds have taught less than ten years.



ARE THERE ANY INSTITUTIONAL DIFFERENCES?

Correctional Teachers Have More Work Experience

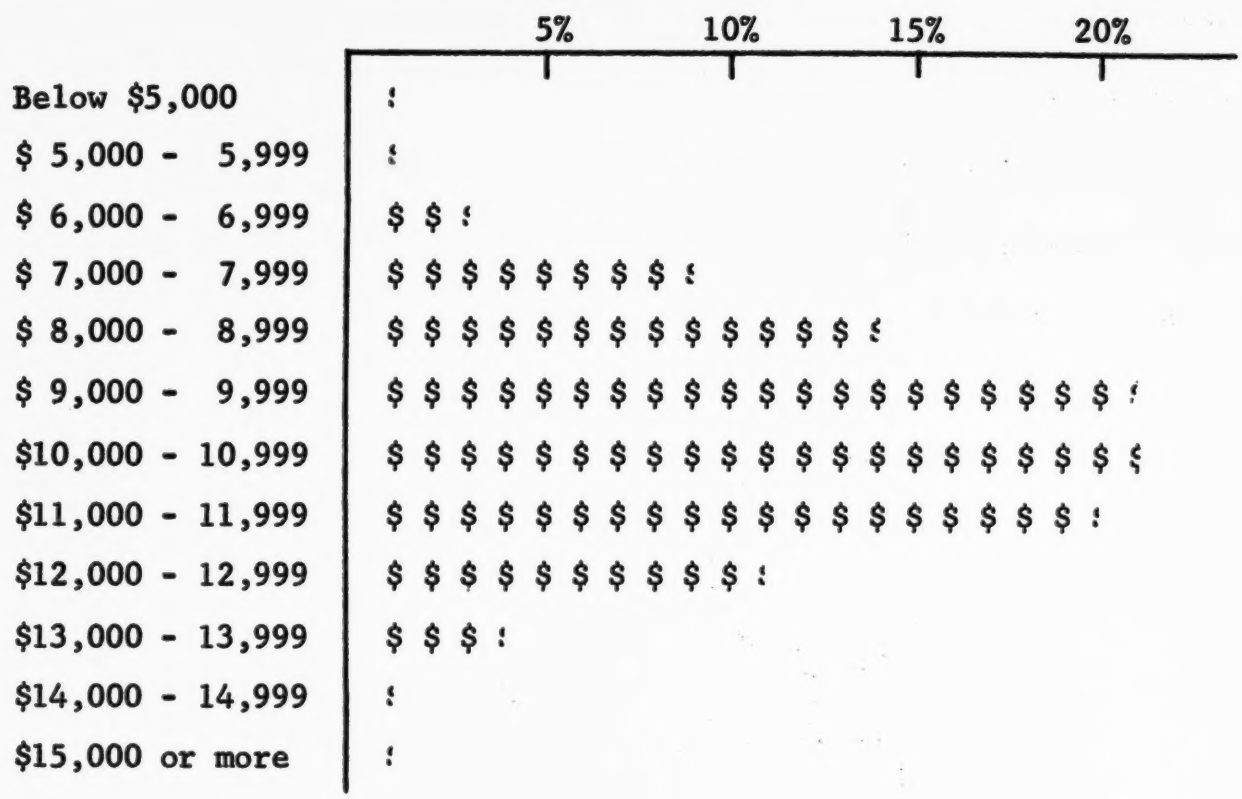
	Median Number of Years
High school teachers	13.7
Junior college teachers	13.8
Correctional teachers	18.5
Other teachers	16.2

Public School Teachers Have More Formal Education

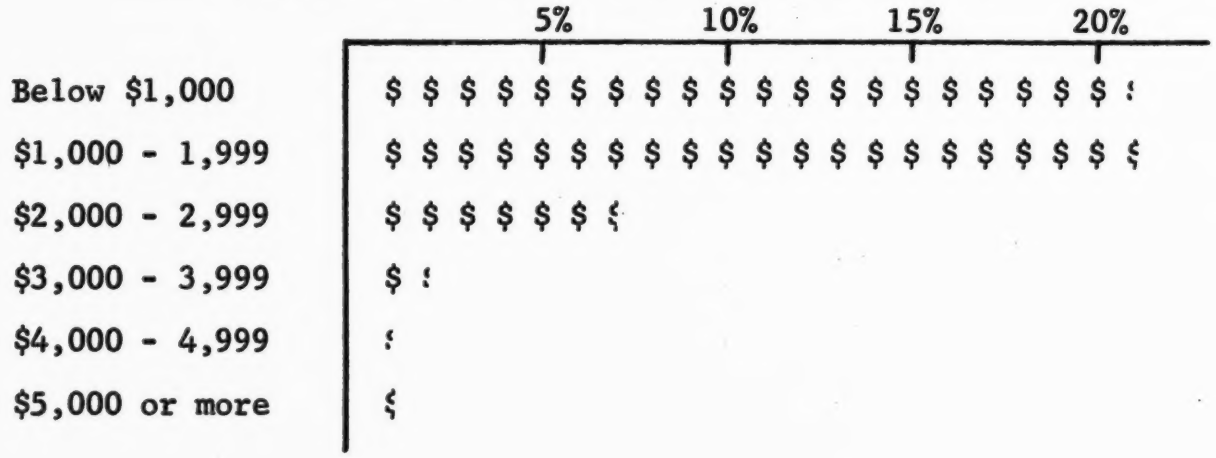
	Per Cent of Public School Teachers	Per Cent of Correctional Teachers
High school diploma	4.0	11.5
Junior college courses	11.7	31.1
RN	2.5	----
Non-extension college courses	24.4	37.1
Bachelor degree	32.5	6.6
Master degree	16.6	3.6
Doctor degree	1.0	----

HOW MUCH DO PUBLIC SCHOOL TEACHERS EARN?

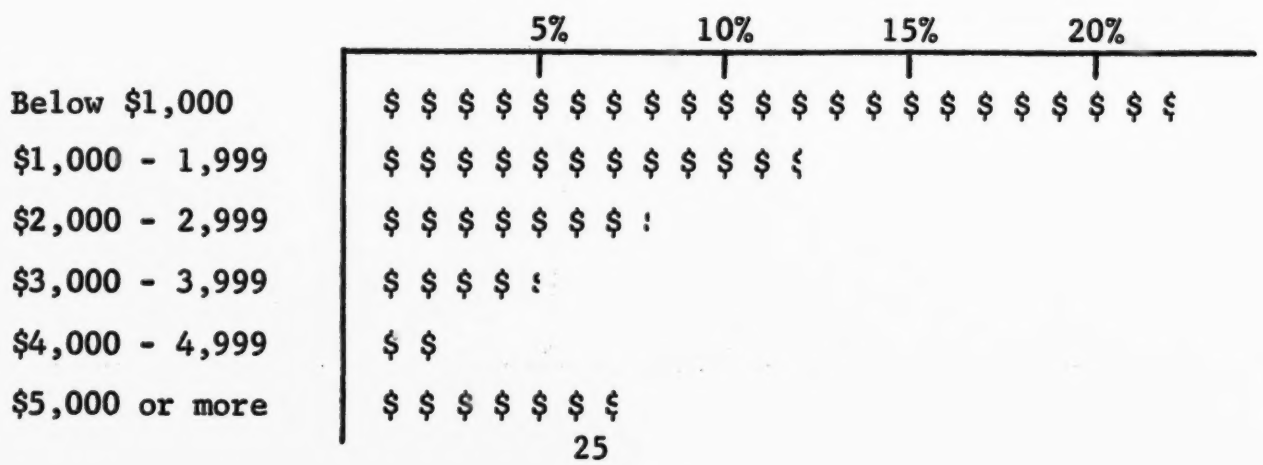
Regular Full-time Income



Additional Income From Educational Sources



Additional Income From Non-educational Sources



WHAT IS APPRECIATED MOST IN PRE-SERVICE PREPARATION?

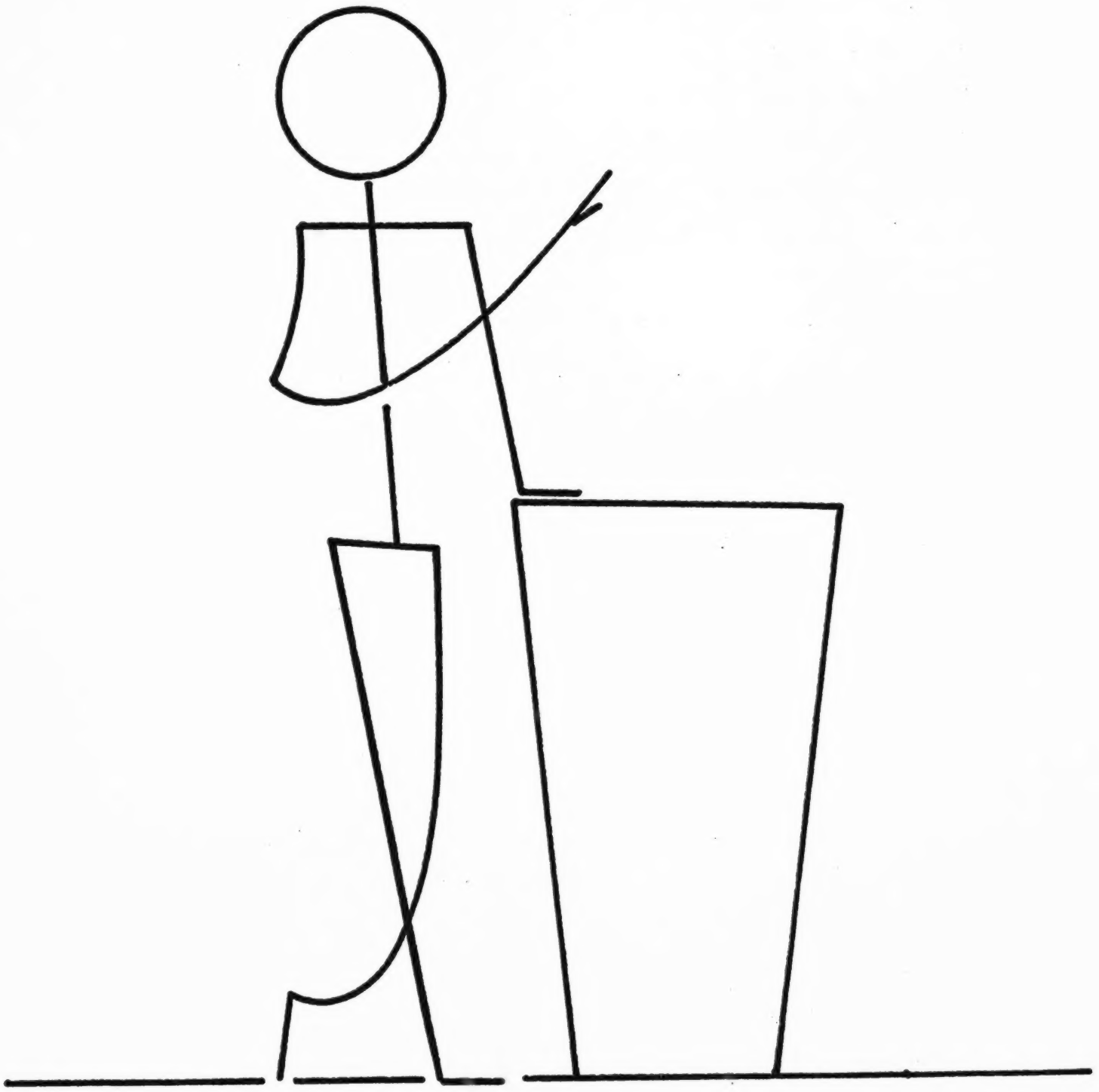
Demonstrations by master teachers

Practice in actual instruction

Emphasis on methods and techniques related to subject areas

Help in lesson planning

Help in curriculum development

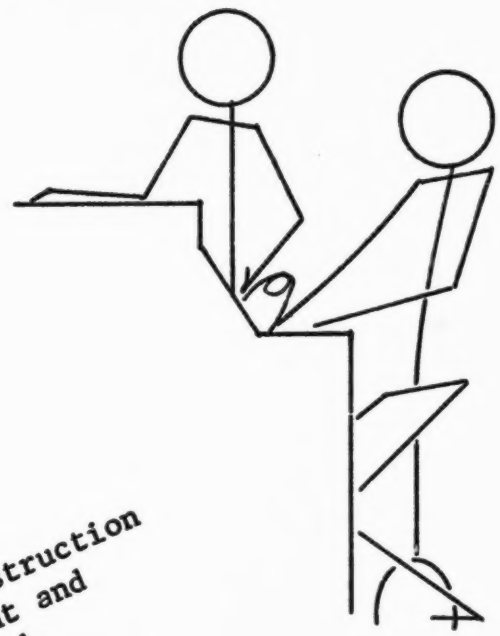


WHAT DO TEACHERS SUGGEST FOR IN—SERVICE TRAINING?

Workshops and seminars for specific subject areas should be provided.

Industrial organizations and institutions of higher education should sponsor in-service training.

Latest information in the trade and technical fields should be disseminated.



Training for vocational counseling should be provided for teachers and counselors.

Master teachers should be employed for in-service instruction.

Sound methods of instruction should be taught and demonstrated.

Central responsibility, direction, coordination and communication for in-service training should be established.

Credit should be provided on the salary schedules of school districts for in-service training.

HOW DO TEACHERS PERCEIVE A GOOD SCHOOL ENVIRONMENT?

Philosophy of administration that supports vocational education

Equal status with academic teachers

Professional advancement related to trade and technical competence

Adequate vocational counseling for all students

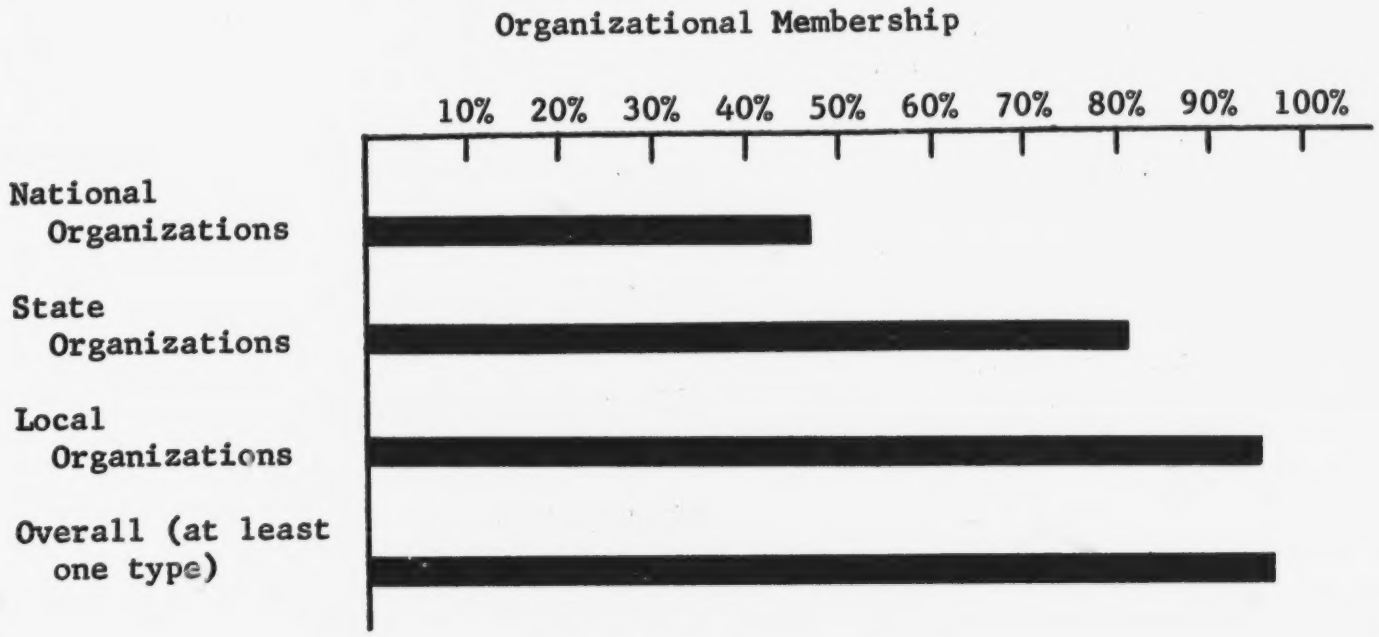
Competent students

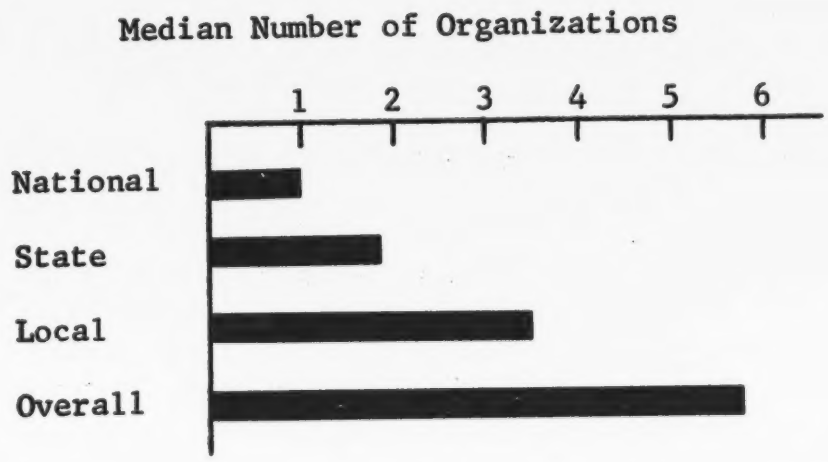
Vocational orientation for all students

Students who complete their training for a job

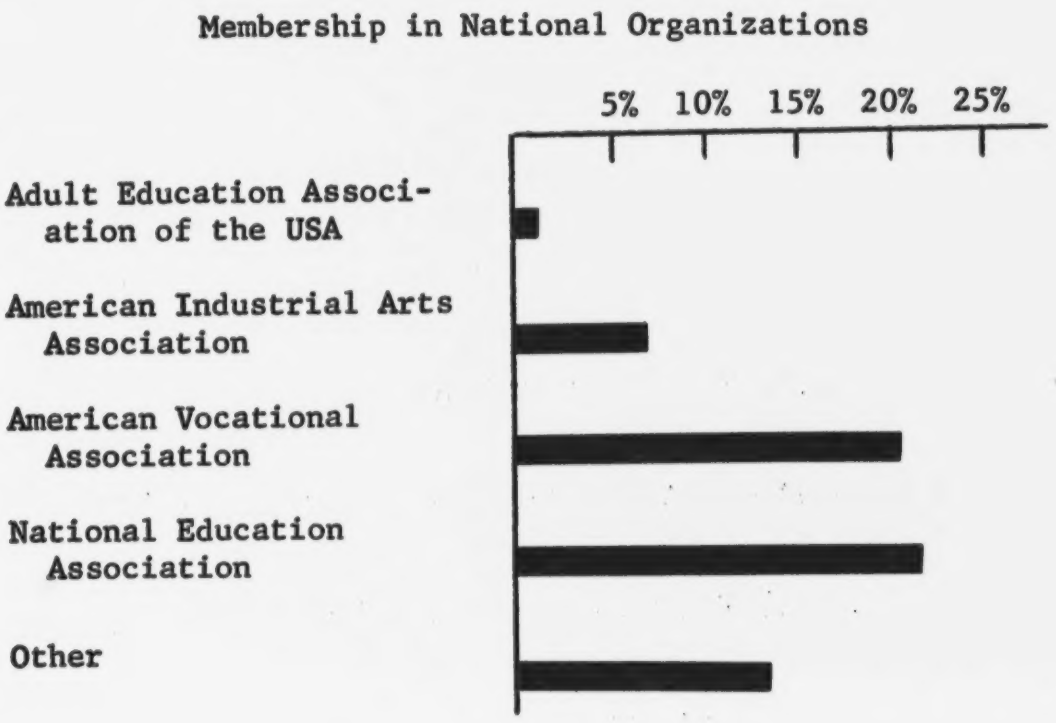
Adequate space

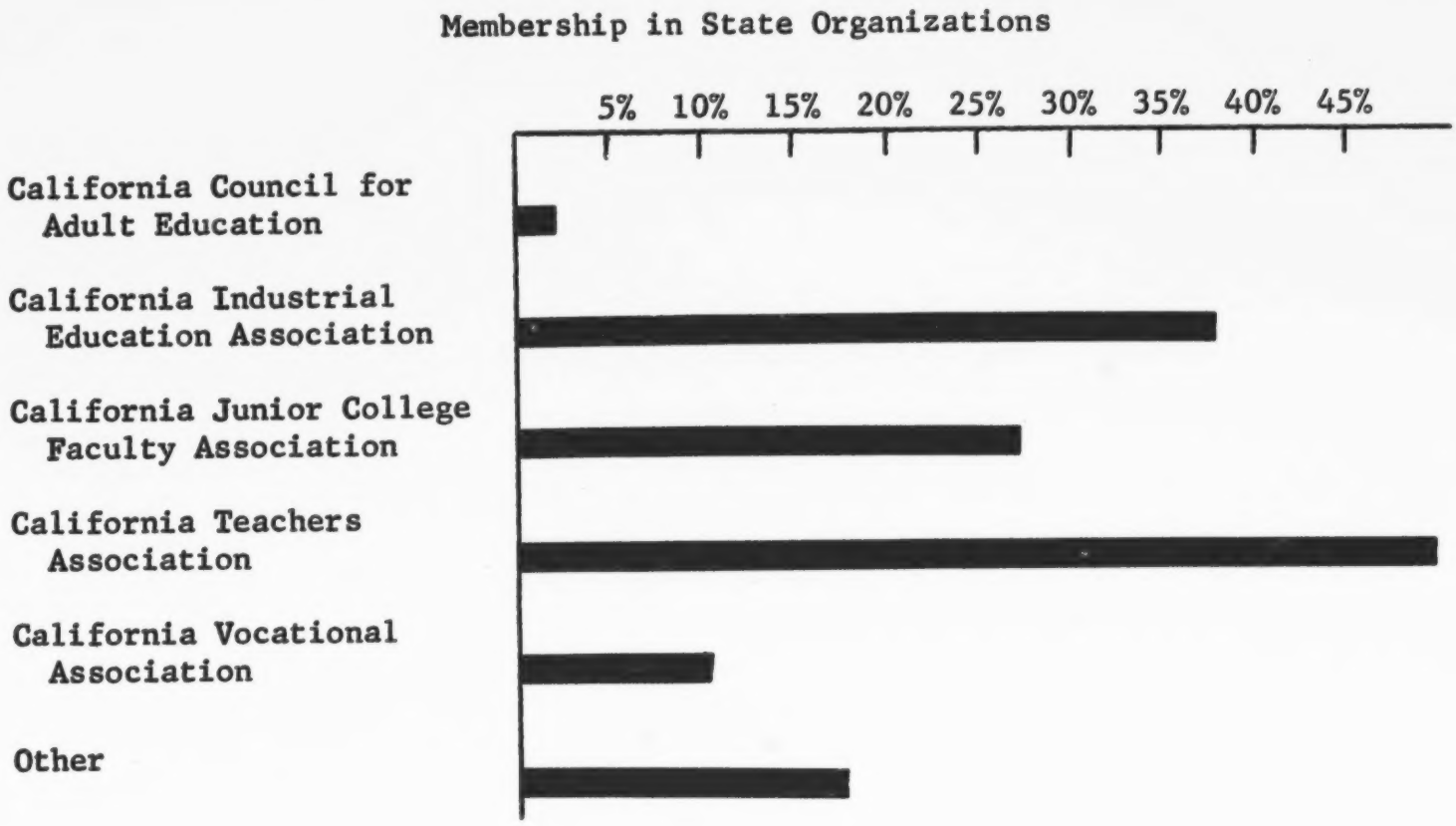
DO TEACHERS JOIN ORGANIZATIONS?



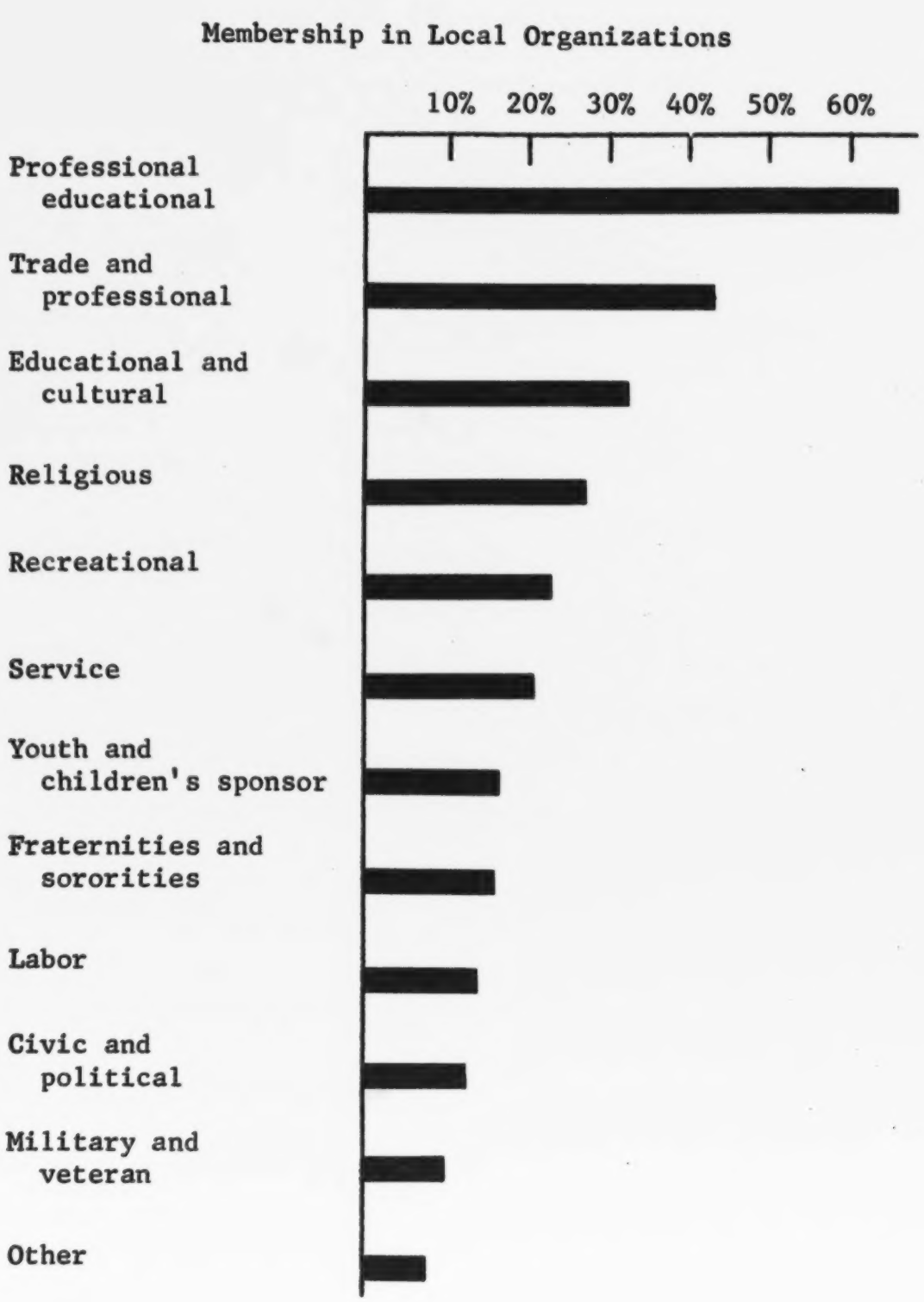


WHAT ORGANIZATIONS DO TEACHERS JOIN?





WHAT ORGANIZATIONS DO TEACHERS JOIN?

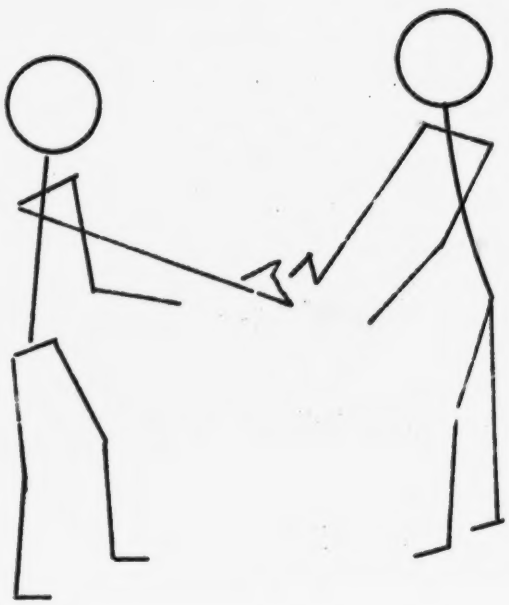


WHAT CHARACTERIZES THEIR ORGANIZATIONAL AFFILIATIONS?

Memberships in organizations are also found to increase with age, salary and additional credentials.

The percentage of memberships in general teacher organizations is larger than the percentage in vocational teacher organizations.

Higher percentages of "joiners" have academic degrees, assume more additional school-related responsibilities, are employed by junior colleges and teach in large towns and cities.9



Higher percentages of "non-joiners" are employed by correctional institutions and have Catholic religious affiliations. Lower percentages have academic degrees, teach in large towns and have Protestant religious affiliations.9

Memberships are predominantly related to the teaching profession.

9The "joiners" are teachers who are members of ten or more organizations. The "non-joiners" are teachers who are not members of any organization.

WHAT IS THE COUNTY DISTRIBUTION OF TEACHERS?